## ABSTRACT OF THE INVENTION

The present invention is directed to an arylation of a nuclophile by
reacting the nucleophile with a substrate aromatic compound ArX in the
presence of a copper catalyst, a base and water, wherein Ar is aryl,
heteroaryl or alkenyl, X is halo, sulfonate or phosphonate, the base
comprises an alkaline earth carbonate, bicarbonate, hydroxide or phosphate,
and the copper catalyst comprises a copper atom or ion and a ligand.

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